

SENIOR RESEARCH PHYSICIST, DR-1310-III

Announcement No. 06-DE-527355

Opening Date: 05 April 06

Closing Date: 2 May 06

AREA OF CONSIDERATION: Open to current and former Federal employees with reinstatement eligibility. In accordance with (Public Law 106-117) section 511 Veterans Employment Opportunities Act of 1998 (VEOA), a veteran who has been honorably separated and either a preference eligible or have substantially completed three or more years of active service, and a veteran who is released under honorable conditions shortly before completing a three year tour is also eligible to apply.

LOCATION: Air Force Material Command (AFMC), Air Force Research Laboratory (AFRL), Directed Energy Directorate (DE), Optics Division (DES), Engineering Branch (DESE), Kirtland Air Force Base, New Mexico.

DUTIES: 50% time; Serves as program manager for the Optical Components engineering Laboratory (OCEL). Responsible for the general management of the OCEL including technical and financial management; personnel, contract, and facility planning and oversight; and business development. Develops and maintains internal and external contacts to grow the OCEL into a self-sufficient coating, characterization, and evaluation facility. Serves as resident expert in optical coating, characterization, and evaluation. Uses experience in thin film deposition and scatter, absorption, and reflectance measurement of optical materials to develop improved coating processes and designs. Uses optical coating knowledge and experience to apply High Energy Laser (HEL) coatings and conduct metrology of large ($\sim 1.5\text{m}$) optics. Responsible for all aspects of environmental, safety, security, and property plans, permits, and approvals.

50% time: Serves as a senior research physicist working on division technical efforts. Uses knowledge of optical design, laser physics, opto-electronic components, mechanical design, and systems integration to advance the state-of-the-art in directed energy systems. Applications include fixed and mobile ground-based laser propagation and imaging systems, airborne imaging, self-protect, and communications, and space-based directed energy systems. Particularly, serves as the principal investigator for programs developing ground based fourier telescopy technology for high-resolution imaging of LEO and GEO space objects.

Publishes articles and reports on branch and division R&D advances. Briefs internal and external management and presents programming and technical results to internal and external customers. Participates in prof societies and establishes network of experts outside the AF.

Educational Requirement: a bachelor's degree in physics; or related degree that included at least 24 semester hours in physics, or combination of education and experience.

KNOWLEDGES, SKILLS, AND ABILITIES:

1. Knowledge of thin film deposition, scatter, absorption, and reflectance measurement, and optical element fabrication for optics up to 100” to include low temperature and HEL coatings.
2. Knowledge of optical design, opto-electronic component specification, opto-mechanical design, and system integration.
3. Skill in directing small multi-disciplinary research teams in opto-mechanical system design.
4. Ability to plan, develop, and maintain a customer base for fee-for-service facility (preferably an optical coating and fabrication facility) and ensure year-to-year solvency; demonstrated by the ability to define products and capabilities, develop a customer base, and conduct customer negotiations.

SPECIAL REQUIREMENTS/CONDITIONS:

This is an APDP position Level II Critical certification in SPRD&E (S).

This position requires a Top Secret security clearance.

Financial Disclosure Statement required.

PCS expenses may or may not be authorized.

QUALIFICATIONS:

You must have one year of specialized experience at a level close to the work of this job that has given you the particular knowledge, skills, and abilities required to successfully perform. Typically we would find this experience in work, within this field or a field that it is closely related.

SPECIALIZED EDUCATION:

You must show successful completion of a full course of study in an accredited college or university leading to a bachelor's degree or higher in engineering, physical science, or mathematics.

NOTE: Applications must be RECEIVED BY the closing date of the announcement to receive consideration. Email and faxed applications will not be accepted. Applications mailed using government postage and/or internal federal government mail systems are in violation of agency and postal regulations and will not be accepted. Incomplete applications will NOT be considered. Point of Contact: Debbie Chavez, at (505) 853-0303 or DSN 263-0303.

How to Apply:

You must submit your application so that it will be received by the closing date of the announcement. Please submit a resume or OF 612 along with the following documents:

1. Transcripts
2. DD Form 214, or SF 50 (which ever applies)
3. KSAs addressed on a separate paper.

Please mail all documents to the following address:

377 MSS/DPCA
1451 4th St. SE, Bldg 20245, Room 132
Kirtland AFB NM 87117-5625
Attn: Debbie Chavez